- Meyer de Schauensee, R. 1966. The species of birds of South America with their distribution. Acad. Nat. Sci., Philadelphia.
- Remsen, J. V. & Traylor, M. A. 1983. Additions to the avifauna of Bolivia, Part 2. Condor 85: 95-98.
- Remsen, J. V. & Traylor, M. A. 1989. An annotated list of the birds of Bolivia. Buteo Books, Vermillion, SD.
- Remsen, J. V., Cadena, C. D., Jaramillo, A., Nores, M., Pacheco, J. F., Robbins, M. B., Schulenberg, T. S., Stiles, F. G., da Silva, J. M. C., Stotz, D. F. & Zimmer, K. J. 2007. A classification of the bird species of South America. www.museum.lsu.edu/~Remsen/SACCBaseline.html (version 10 January 2007).
- Parker, T. A., Gentry, A. H., Foster, R. B., Emmons, L. H. & Remsen, J. V. 1993. *The lowland dry forests of Santa Cruz, Bolivia: a global conservation priority.* RAP Working Papers 4. Conservation International, Washington DC.
- Schulenberg, T. S. & Awbrey, K. 1997. A rapid assessment of the humid forests of south-central Chuquisaca, Bolivia. RAP Working Papers 8. Conservation International, Washington DC.
- Addresses: J. A. Tobias, Edward Grey Institute of Field Ornithology, Dept. of Zoology, Univ. of Oxford, South Parks Road, Oxford OX1 3PS, UK. N. Seddon, Department of Zoology, Univ. of Cambridge, Downing Street, Cambridge CB2 3EJ, UK. Present address: Edward Grey Institute of Field Ornithology, Dept. of Zoology, Univ. of Oxford, South Parks Road, Oxford OX1 3PS, UK.

© British Ornithologists' Club 2007

# Birds of Damar Island, Banda Sea, Indonesia

## by Colin R. Trainor

Received 22 November 2006

Wallacea, in the extreme south-east corner of Asia, has an extraordinary avifauna. A staggering ten Endemic Bird Areas (EBAs) and 67 Important Bird Areas have been identified (Stattersfield *et al.* 1998, BirdLife International 2004); indeed the region's exceptional diversity has challenged identification of conservation priorities, including the ordering of on-ground baseline surveys. Field studies have intensified since the 1980s, with discoveries of new bird taxa, numerous rediscoveries, and new natural history data for poorly known species (e.g. Lambert 1998a,b, Rasmussen 1999, Riley & Wardill 2001, Rozendaal & Lambert 1999, Olsen *et al.* 2002, Indrawan & Somadikarta 2004, Sangster & Rozendaal 2004). Yet the sheer number of islands (*c.*13,500) and consequent idiosyncratic spatial distribution of their 260+ (taxonomy dependent) endemic species has, amongst other factors, slowed efforts to evaluate bird species status.

In south-east Wallacea, the Banda Sea Islands Endemic Bird Area (EBA 165) is dominated by ocean and numerous widely scattered islands. Seventeen of the 40 globally restricted-range birds are confined to this EBA, and most of the remainder occur in neighbouring EBAs (Stattersfield *et al.* 1998). Recent avifaunal surveys within EBA 165 have been undertaken only on the Tanimbar and Kai islands (Coates & Bishop 1997, Bishop & Brickle 1998, Jepson *et al.* 2001), though the area has long been identified as a national conservation priority (FAO 1982, Sujatnika *et al.* 1995). Damar (07°08'S, 128°41'E; 198 km<sup>2</sup>, max. altitude 868 m) is a remote volcanic island 380 km south-east of Ambon and 200 km north-east of Timor-Leste (East Timor), in the Maluku Tenggara Barat district of Maluku province, Indonesia; and is the only other island within the EBA known to host a single-island endemic.

The first Damar specimens involved three birds obtained by the Dutch civil servant Johann G. F. Riedel, as noted by Mever (1884) and Hartert (1900), between August 1883 and June 1884 (van Steenis-Kruseman 1950). Twelve species were collected on Damar during 6-11 November 1891 by officers (P. W. Bassett-Smith and J. Walker) of the HMS Penquin, and a further 39 by Heinrich Kühn, during his two-month visit from c.30 October–30 December 1898 (Sharpe 1894, Hartert 1899, 1900; dates established from specimen labels, per N. J. Collar). Kühn was a professional collector in the employ of Lord Walter Rothschild (Rothschild 1983), as part of a complex network of collectors scattered throughout the world. A review of the bird fauna of the South-west islands by Finsch (1901) listed 52 species for Damar. During his time there, Kühn collected one species new to science, the endemic Damar Flycatcher Ficedula henrici. As far as is known, no ornithologist visited Damar during the 20th century (BirdLife International 2001). Chiefly because of its tiny global range and the century gap in information on its status, this flycatcher has been considered globally threatened (Stattersfield et al. 1998, BirdLife International 2004). For that reason, on-the-ground surveys were planned for 1998, to coincide with the 100th anniversary of the bird's discovery, but these

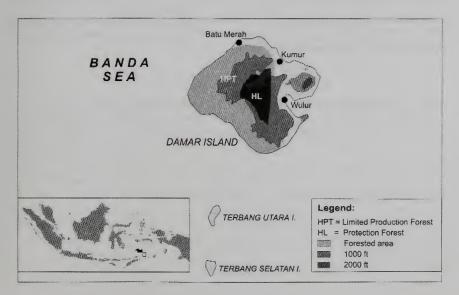


Figure 1. Map of Damar showing estimated forest cover, the main villages and the Terbang Islands.

were abandoned due to widespread communal violence in Maluku at the time (BirdLife International 2001; J. C. Eames pers comm. 2001, G. Dutson *in litt*. 2002). This paper reports on field work undertaken in August–September 2001. It describes the habitat range and conservation status of all birds on Damar and two small satellite islands. Popular accounts have been published elsewhere (BirdLife-IP 2001, Shannaz 2002, Trainor 2002a,b) and a sister paper (Trainor 2007) will examine bird community composition in relation to forest disturbance.

### The island

Damar is mostly hilly (c.70% of land area is at 200-400 m a.s.1.), but only steeply sloping on Mount Wurlali volcano. No weather stations exist locally, but rainfall on nearby Romang Island averages 2,518 mm/year; coasts are dry and rainfall tends to increase with elevation (RePPProT 1989). Approximately 75% (c.150 km<sup>2</sup>) of the island retains closed-canopy tropical forests (canopy closure >70%), including dry forest near the coast with many deciduous trees (to 12-20 m tall), grading into semievergreen and evergreen forest further inland (to 40 m tall), above c.60 m elevation. There are no protected areas, and forest status is protection forest or production forest (Fig. 1). Damar's human population was 4,745 in the year 2000 (Central Statistics Office. Wonreli Kisar), with seven villages of 303-1.056 citizens on the north-west, north and east coasts. The economy is subsistence, based on sale of agricultural cash crops: coconut Cocos nucifera, cloves Eugenia aromatica and nutmeg Myristica fragrans. Sago Metroxylon sagu is grown around springs in modified coastal lowlands, and locally in forest plots. Forest is used for conversion to smallholder agricultural plots, timber collection and moderately intensive hunting of pigs, Common Palm Civet Paradoxurus hermaphroditus, pigeons and Orangefooted Scrubfowl Megapodius reinwardt.

Sites	Dates	Habitat	Field survey hrs
Batumerah forest (0–120 m)	27-31 August	1,2	24
Batumerah, Awehnyo coast (0–40 m)	27–31 August	3	4
Kumur forest / Ayerkota Valley (0-340 m)	1–3 September	1,3	18
Bebar Timur (0–200 m)	25 August	2,3	4
Wulur forest (10-440 m)	18 August	1,3	48
Wulur, 3 km south-east (0-80 m)	14 August-11 September	1,3	20
Terbang Utara (0–60 m)	8–9 September	2	6
Terbang Selatan (0-60 m)	8 September	2	6
			Total 130

TABLE 1

Summary of study sites and survey effort; major sites in bold. Habitats: 1 = primary evergreen
forest/semi-evergreen forest, 2 = primary tropical dry forest, 3 = modified mangrove forest,
vegetable gardens, sago and/or plantations.

TABLE 2									
Global distribution of 'key' bird species recorded on Damar.									

Species	Worldwide range
Orange-footed Scrubfowl Megapodius reinwardt	Wallacea, Nusa Penida, Kangean, Aru, New Guinea, Australia
Beach Thick-knee Esacus neglectus	Australasia and SE Asia
Metallic Pigeon Columba vitiensis	Insular SE Asia, Papua, Melanesia, Polynesia
Barred-necked Cuckoo-Dove Macropygia magna	S Sulawesi islands and E Lesser Sundas
Blue-tailed Imperial Pigeon Ducula concinna	Small islands in Wallacea, Aru,
	W New Guinea
Pink-headed Imperial Pigeon Ducula rosacea	Java Sea islands, Wallacea
Black-backed Fruit Dove Ptilinopus cinctus	Lesser Sundas, Bali
Rose-crowned Fruit Dove Ptilinopus regina	SE Maluku, Lesser Sundas, Aru, Australia and
7 0	New Guinea
Blue-streaked Lory Eos reticulata	Tanimbar, Kai, and Babar
Olive-headed Lorikeet Trichoglossus euteles	E Lesser Sundas
Little Bronze Cuckoo Chrysococcyx minutillus	SE Asia, Australasia
Cinnamon-collared Kingfisher Todiramphus australasia	Lesser Sundas (except Sumbawa/Alor)
Elegant Pitta Pitta elegans	Sangihe, Sula, Maluku, Lesser Sundas,
0	Flores Sea islands, Nusa Penida
Orange-banded Thrush Zoothera peronii	E Lesser Sundas
Damar Flycatcher Ficedula henrici	Damar
Rufous-sided Gerygone Gerygone dorsalis	Islands in Flores Sea, SE Maluku and E Lesser Sundas
Spectacled Monarch Monarcha trivirgatus	Maluku, Lesser Sundas, Australia, New Guinea
Golden Whistler Pachycephala pectoralis	Australasia, Wallacea, Bali, E Java
White-bellied Whistler Pachycephala leucogastra	SE Wallacea
Scaly-breasted Honeyeater Lichmera squamata	SE Maluku and E Lesser Sundas
Red-chested Flowerpecker Dicaeum maugei	S Sulawesi islands, Lesser Sundas

### Study sites and methods

Surveys were undertaken over 30 days (14 August–12 September) at three major forest sites on Damar (Batumerah, Kumur and Wulur [Batoe Merah and Woeloer of Hartert 1900]) and five minor sites, including two offshore islets: Terbang Utara (07°18'S, 128°33'E; 6 km<sup>2</sup>) and Terbang Selatan (07°22'S, 128°33'E; 5 km<sup>2</sup>) (Fig. 1, Table 1). Wulur village in the east of the main island was used as a main base, with forest accessed in the north-west and centre-north of the island via the coastal villages of Batumerah and Kumur. I camped at each of the three main sites for 2–5 nights (c.2-4 km from populated centres), on Terbang Utara for one night, and otherwise made daytime visits from village bases to minor sites.

At Batumerah and Wulur two mist-nets (9 m long  $\times$  4 m high) were operated for five and six days respectively. Captured birds were identified, measured (Damar Flycatcher and Orange-sided Thrush *Zoothera peronii*) and photographed. At these two sites, and Kumur, systematic point counts were used to survey bird community composition in primary forest and secondary habitat, but this information will be presented elsewhere. General observations, over 2–3 km<sup>2</sup> at each site, included noting species by habitat and elevation, with additional information on number of individuals, sex, perch height and behaviour noted for 'key' birds (see Table 2). Elevation was measured using an altimeter, and geographic coordinates were extrapolated from the Google earth programme. Playback was used *ad hoc* at Batumerah and Wulur to elicit responses from Rainbow Pitta *Pitta elegans*, Cinnamon-banded Kingfisher *Todiramphus australasia*, Damar Flycatcher (using Little Pied *Ficedula westermanni* and Sumba Flycatchers *F. harterti*) and *Ninox* owls (using Southern Boobook *Ninox novaeseelandiae* from Timor). Calls of Shining Flycatcher *Myiagra alecto* were used to elicit responses from monarch flycatchers. Vocalisations were tape-recorded using a Sony Professional recorder TCM-5000EV with a Sennheiser ME-66 directional microphone, and analysed by Richard Ranft at the British Library Sound Archive, London, UK, using the Avisoft-SASLab Pro programme.

### **Records of interest**

Thirteen of the 38 resident birds listed for Damar by 19th century collectors are globally restricted-range species, and most of them are forest dependent. Two others, Rufous-sided Gerygone *Gerygone dorsalis kuehni* and Golden Whistler *Pachycephala pectoralis dammeriana*, are represented on Damar by endemic subspecies. The following annotated list focuses on the habitat range and conservation status of the threatened, Near Threatened (NT), restricted-range (RR, global range >50,000 km<sup>2</sup>) and forest-dependent species identified (the 'key' birds, see Table 2). I recorded 54 species (22 forest-dependent) on Damar and the Terbang Islands: 48 on Damar, and 34 on the Terbang Islands (25 on Terbang Utara and 28 on Terbang Selatan). This total excludes the unconfirmed record of Brush Cuckoo *Cacomantis variolosus* and a species of rail on Damar. All records are new for the Terbang Islands. I also provide details of the five species not previously recorded in the Damar group, and the 15 new island records from Damar itself. A complete list of the 73 species recorded from Damar and the Terbang islands both historically and recently appears as an Appendix. Where quoted, global threat status follows BirdLife International (2004).

### **ORANGE-FOOTED SCRUBFOWL** Megapodius reinwardt

Usually observed as pairs or singles on Damar (0-440 m) but abundant on Terbang Selatan with c.5 records per hour. Present in forest and coastal vegetation except around Wulur where it is hunted intensively. Active nest mounds were found at Batumerah, Kumur and Terbang Selatan. 'Common on Dammer Island' (Hartert 1900).

### RAIL SP.

A dark brown rail was observed briefly as it entered dense shrub near mangroves at Wulur on 16 August. Red-necked Crake *Rallina tricolor* and White-breasted

Waterhen *Amaurornis phoenicurus* were collected by Kühn (Hartert 1900), with the former species the most likely of these two (amongst other) possibilities, based on coloration. Red-necked Crake is widespread in the Papua region, and north-east Australia, but Damar lies at the western extremity of the range (Coates & Bishop 1997).

### **BEACH THICK-KNEE** Esacus neglectus (NT)

Common on Terbang Selatan: one foraged on barnacles and other molluscs on an exposed rocky shelf and, subsequently, a further three arrived in the same area to feed. A pair was later observed on another beach. On Terbang Utara there were records of two singles indicating the abundance of this typically low-density beach-specialist on the islands. Not recorded on Damar and absent there according to local men.

### **METALLIC PIGEON** Columba vitiensis

This inconspicuous forest pigeon was recorded five times in primary evergreen forest (60–340 m) suggesting that it is relatively common. At Wulur a hunter shot one on 19 August and stated that he had only once previously obtained the species (Y. Lutruwowan pers. comm.). Measurements and bare parts: total length 415 mm, tail 155 mm, wing 242 mm, culmen 25 mm, tarsus 30 mm, orbital ring crimson, cere and base of bill crimson, iris orange, bill pale yellow to white. Subsequently, a second was shot in the same area (S. Romode pers. comm.). At Batumerah one was observed for two minutes in primary forest perched at 12 m, above a stream, apparently preparing to drink. Hartert (1900) wrote that it was 'found frequently in November and December'.

### BARRED-NECKED CUCKOO-DOVE Macropygia magna (RR)

Apparently local and uncommon on Damar where found twice in degraded beach forest and coconut plantation (5–60 m) at Batumerah, the first island records. One was observed for two minutes perched at 14 m in degraded beach forest on 31 August. The two-note *avoot-voo* calls heard on Damar are probably indistinguishable from the *koowuck-whuuuu* transcribed for race *timorlaoensis* on Yamdena (Tanimbar) (Coates & Bishop 1997) and Alor (Trainor 2005a). In comparison, subspecies *magna* of Timor and Wetar has a three-note call (Coates & Bishop 1997), and occurs on Romang (adjacent to Damar) although its call there is unknown.

### BLUE-TAILED IMPERIAL PIGEON Ducula concinna (RR)

Abundant in forest throughout Damar, common on Terbang Selatan but unrecorded on Terbang Utara; its powerful *urrauw* was a near-constant background sound. Observed feeding in nutmeg (one shot had a nutmeg fruit in its oesophagus) and local people stated that the species consumes fruit of *Canarium* sp., *Gnetum* gnemon, Barringtonia asiatica, Paraserianthes falcataria, Eusideroxylon zwageri, Toona sureni and Ficus spp. It was intensely hunted with air-rifles and generally

305

absent from second growth near villages. On 19–20 August, two nests were observed at 25 m and 30 m above ground in primary evergreen forest at Wulur (360 m); one bird was observed carrying a large stick at Batumerah camp (31 August 2001) and another with nesting material at Kumur (3 September 2001). 'One male and two females were shot' (Hartert 1900).

### PINK-HEADED IMPERIAL PIGEON Ducula rosacea (NT, RR)

Uncommon to locally absent in primary semi-evergreen forest (possibly outcompeted by Blue-tailed Imperial Pigeon?), but common in modified lowlands and tropical dry forest (0–340 m), and abundant in tropical dry forest on Terbang Utara.

## BLACK-BACKED FRUIT DOVE Ptilinopus cinctus

Strongly associated with primary evergreen and tropical dry forest, where common to abundant on Damar and both Terbang islands. It apparently suffers less hunting pressure than Blue-tailed Imperial Pigeon because of its smaller size and less conspicuous habits. Birds were observed eating figs on Terbang Selatan. Hartert (1900) noted 'a fine series from Damer [*sic*]'.

### **ROSE-CROWNED FRUIT DOVE** *Ptilinopus regina*

Very common on Damar, Terbang Utara and especially Terbang Selatan where strongly associated with primary evergreen and tropical dry forest, but visits fruit trees in all habitats. Hartert (1900) noted that they were 'not rare in different parts of the island, at Batoe Merah [Batumerah] and Wulur'.

### BLUE-STREAKED LORY Eos reticulata (RR, NT)

This poorly known lory was uncommon, as singles, pairs and groups of up to six in tropical evergreen forest and forest edge. The only record away from forest was of a few feeding in a flowering coconut. Several fed with ten Olive-headed Lorikeet Trichoglossus euteles in a flowering Syzygium sp. near Batumerah. At Kumur there were ten records of 1–6 individuals (total 37, mean group 3.7), including six feeding on flowers in the canopy of a Paraserianthes falcataria tree. On Damar this species is seasonally trapped for the cagebird trade but none was known to have been captured during the study period. Ninety-seven were traded in Medan, Sumatra, in 1997-2001 (Shepherd et al. 2004). Blue-streaked Lory was probably introduced to Damar as a cagebird, as noted by Hartert (1901): 'In former numbers of Novitates Zoologicae I have stated that Eos reticulata was sent by Mr. Kühn from Toeal on Little Key, and from Dammer in the Banda Sea. Mr. Kühn now writes that it was apparently introduced to both Dammer and the Key group, and that the Tenimber Islands are its sole natural home.' Blue-streaked Lory is much more abundant in the Tanimbar Islands (Jepson et al. 2001) than on Damar, and has not been reported from the Kai Islands since the 1890s (Bishop & Brickle 1998). There is an unconfirmed sight record from Wetar (White & Bruce 1986) and reliable anecdotal

Colin R. Trainor

reports from Timor-Leste (CRT unpubl.), perhaps indicating regular inter-island flights (or cagebird escapees). Two adult males were shot by Kühn (Hartert 1900).

### **OLIVE-HEADED LORIKEET** Trichoglossus euteles (RR)

Abundant, with several hundred observations in highly modified lowland habitats including coconut plantations, secondary forest and mangroves, but less common in primary semi-evergreen forest. Numerous observations of singles and pairs feeding in flowering coconut trees throughout the lowlands (notably at Ayerkota Valley near Kumur), and once on *Syzygium* flowers. Local men indicated that birds are trapped annually and sold for less than US\$1 each (Y. Romadae & M. Surlialy pers. comm.), but no captives were observed in villages. Endemic to the Lesser Sundas and appears commoner on small islands such as Adonara (Trainor 2002), Atauro (Trainor & Soares 2004) and Lembata (Trainor 2003) than on large ones such as Timor (CRT unpubl.). A 'good series' was collected (Hartert 1900).

#### LITTLE BRONZE CUCKOO Chrysococcyx minutillus

Subspecies *rufomerus*, described in 1900 and distributed on the Banda Sea islands of Moa, Kisar, Leti, Sermata, Romang and Damar, had not been reported in the wild since *c*.1905. It was common in forest edge, villages, agricultural land and forest (0–400 m), where observed as singles, pairs and small groups of up to five, perching low on logs and branches and taking insects on the wing or gleaning from low bushes, including *Capsicum* sp. They also pounce on the ground to take insects from bare soil or litter, with one seen taking a caterpillar. *Chrysococcyx* parasitise the genus *Gerygone* throughout the latter's range (Brooker & Brooker 1989). On several occasions cuckoos were mobbed by their presumed local host Rufous-sided Fairy-warbler *Gerygone dorsalis* (and by Ashy-bellied White-eye *Zosterops citrinellus*). The call was an accelerating whistled trill of 3.2 seconds, ascending almost imperceptibly in pitch over the first half, then descending noticeably, and comprising 45 notes. Peak frequencies shifted from 3.2 kHz initially, to 3.2 kHz over the middle notes and 2.8 kHz terminally (Fig. 2a). The song comprised *c*.4–5 whistled *kiri* notes in a rhythmical series lasting 1.0–1.4 seconds, and ranging at

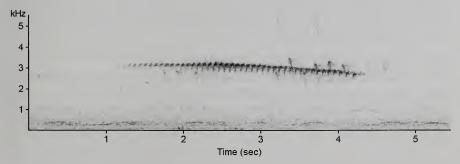


Figure 2a. Little Bronze Cuckoo Chrysococcyx minutillus, accelerating whistled trill.

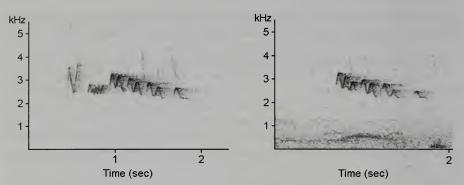


Figure 2b (left). Little Bronze Cuckoo *Chrysococcyx minutillus*, whistled song (example 1). Figure 2c (right). Little Bronze Cuckoo *Chrysococcyx minutillus*, whistled song (example 2).

2.1–3.7 kHz (Figs. 2b, 2c). These vocalisations of *rufomerus* are similar to those of the species elsewhere (R. B. Payne *in litt.* 2006), as is its behaviour, supporting status as a subspecies of *minutillus* (Payne 2005).

### CINNAMON-BANDED KINGFISHER Todiramphus australasia (RR, NT)

Probably common, but inconspicuous and calls irregularly. Recorded in a wide range of wooded habitats including evergreen and dry forest, forest edge and plantation (cashew and clove) from sea level to 440 m. There were few observations within forest (one at Wulur perched at 6 m), but forest-edge birds frequently duetted at dawn and dusk with a raucous *ch-whee*. Twice birds were observed perched on horizontal branches directly above streams (at 2 m), scanning for prey. On 2 September in primary evergreen forest at Kumur, I followed a loud, distinctive and persistent call which led me to an apparently recently fledged bird in the subcanopy. One foraged for invertebrates in leaf litter then flew to a perch at 5 m in a clove plantation. Kühn collected nine specimens (Hartert 1900).

### **ELEGANT PITTA** Pitta elegans

This species called rarely and was observed just twice, in primary forest with a dense rattan understorey. At Wulur and Kumur pairs duetted at dusk, and one called from dry forest on Terbang Utara.

### **ORANGE-SIDED THRUSH** Zoothera peronii (NT, RR)

At the time of the survey there had been no field observations of race *audacis* (East Timor, Wetar, Babar, Romang and Damar) since its description. Ecologically similar to race *peronii* (of Roti and West Timor), it proved to be common in evergreen and tropical dry forest, and frequent in secondary habitats, calling constantly from dawn to late morning and less so in the afternoon. They perched in the subcanopy at 8–16 m, or canopy, but were also observed on logs and the ground. At Kumur a recently fledged juvenile was observed low in shrubs in a banana plantation, and another

recent fledgling with white speckling on its breast was observed preparing to drink in a sago plantation (both 2 September). A bird shot in the wing near Wulur was intended as a pet, but died the following day (N. Rumihin pers. comm.). In West Timor, this bird is intensively captured for trade but there was no evidence of commercial trapping on Damar. Kühn collected at least ten specimens (LeCroy 2005).

### DAMAR FLYCATCHER Ficedula henrici (VU)

Dependent on primary forest (semi-evergreen forest >60-100 m and evergreen forest >100 m, but apparently not tropical dry forest), to at least 440 m, and despite using near-forest smallholder garden and sago groves, appears largely intolerant of forest modification. It was unrecorded from highly modified coastal habitats (beach forest, mangrove, coconut and clove plantations). There were 20 direct field observations of at least 17 individuals including four pairs, and a further 18 aural records made during point counts. A male was mist-netted at Wulur and a male and female captured at Batumerah (Table 3). Only males were heard calling and, presumably, all aural records were of males. Birds perched on the ground or in the understorey at a mean height of 98 cm (n=37, range 0-3 m), especially on rattan, lianas and saplings. In forest they searched for insects on bare ground, rocks, in leaf litter, bases of tree trunks and in adjacent shrubs and saplings, and they flew (n=12, n=1)mean distance 4 m, range 0.5-10 m) between low perches during foraging sallies. Females were observed only four times, each for less than two minutes; they were silent and inconspicuous. Males are paler slate-blue than portrayed in Coates & Bishop (1997), often with a less well-developed forehead and frontal band. The bill, at least of the male, is longer and thinner than depicted in Coates & Bishop (1997), and the white throat patch can be reduced or absent (immatures?). The upperparts of the trapped (possibly immature) female (see Trainor 2002a) are mainly pale brown and grey, with a rich buff belly and chest. A village elder at Kumur (in Damar-Batumerah language: Chlenova & Chlenov 2006) gave the local name of Lwotu

#### TABLE 3

Measurements (mm) for Damar Flycatcher *Ficedula henrici* and Orange-sided Thrush Zoothera peronii trapped in mist-nets, and a flycatcher measured by Hartert (1900). Other birds captured were: Orangesided Thrush (one at Batumerah), Ashy-bellied White-eye Zosterops citrinella (six at Wulur, three at Batumerah), Golden Whistler *Pachycephala pectoralis* (three at Wulur), Spectacled Monarch Monarcha trivirgatus (two at Wulur), Northern Fantail *Rhipidura rufiventris* (one at Wulur) and Rufous Fantail *R. rufifrons* (one at Batumerah).

Dama Flycatcher, finaleBatumerah, 29 August11003441022Damar Flycatcher, femaleBatumerah, 29 August1086247-24Orange-sided ThrushWulur, 22 August208104781932	* /	, 0			• •		
---	-----	-----	--	--	-----	--	--

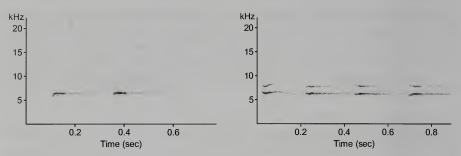


Figure 3a (left). Sonogram of Damar Flycatcher *Ficedula henrici*, two notes in 0.5 seconds. Figure 3b (right). Sonogram of Damar Flycatcher *Ficedula henrici*, four notes in one second.

*lwotu* for Damar Flycatcher, but no other locals had a name for the bird and it is undoubtedly poorly known. Unsurprisingly, playback using calls of Little Pied and Sumba Flycatchers failed to illicit responses from Damar Flycatcher because their calls are not similar. The call is a thin, high-pitched, metallic, insect-like *seep*, given singly or often doubled, *seep-seep*, lasting 0.3 seconds (Fig. 2a), whilst the song comprises four very similar notes delivered over *c*.0.7 seconds, with *c*.2.6–4.3 seconds between bouts (Fig. 2b). Each note is *c*.0.05 seconds in duration with a frequency range of 6.2–6.5 kHz. The species' conservation status is evaluated in the Discussion.

### **RUFOUS-SIDED GERYGONE** Gerygone dorsalis (RR)

Represented on Damar by the endemic race *kuehni*, it was common in mangrove, villages and other modified coastal habitats as well as in inland forests, including on the Terbang Islands. Observed feeding singly, in pairs and in small groups (often with Ashy-bellied White-eye *Zosterops citrinellus*) gleaning invertebrates (including grubs) from banana, papaya and cassava leaves and *Ficus* fruit. Its reported absence from large islands of the Kai archipelago (Coates & Bishop 1997) and lack of recent records from Kisar (Trainor 2003), where last reported in 1901, suggest there is much still to learn about its ecology. Under no threat of extinction on Damar.

#### **SPECTACLED MONARCH** Monarcha trivirgatus

The most frequently recorded understorey bird in primary evergreen forest and secondary forest, but absent from the Terbang Islands.

### **GOLDEN WHISTLER** Pachycephala pectoralis

The endemic subspecies *dammeriana* was common in evergreen forest but much less so in secondary habitats, and absent from the Terbang Islands. Females were occasionally seen perched low in the understorey (0.1-3.0 m), on horizontal branches, and hopping thrush-like on the ground. Males were inconspicuous and

Colin R. Trainor

vocalised typically from the subcanopy at 4-12 m. At Batumerah a male gleaned an insect larva from a tree at 3 m then descended to a streambed to hit it on a rock.

### WHITE-BELLIED WHISTLER Pachycephala leucogastra (RR)

This species was occasional in primary evergreen forest, but frequent in secondary habitats and especially mangrove—as on nearby Yamdena (Coates & Bishop 1997). Typically, both sexes were observed singly or in small groups of up to four, with almost all observations at ground level to 4 m. Females were often found low in dense grass beneath coconut palms. In contrast, Coates & Bishop (1997) state that White-bellied Whistlers 'frequent upper tree levels'. Subspecies *kebirensis* is endemic to Damar, Babar, Moa, Wedan and Romang, but the species' taxonomic relationships are unclear.

#### **SCALY-BREASTED HONEYEATER** *Lichmera squamata* (RR)

One of the most frequently encountered birds in secondary habitats and primary evergreen and tropical dry forest.

#### **RED-CHESTED FLOWERPECKER** *Dicaeum maugei* (RR)

Common in forest but less frequently recorded in disturbed coastal habitats. Several were observed feeding at mistletoe (Loranthaceae) flowers on a *Ficus* tree near Kumur. Kühn collected a male at Wulur (Hartert 1900).

## New island records

### FREGATA SP.

Frigatebirds were frequently observed soaring above the coast, with singles and groups of up to 11 noted at Bebar Timur, Batumerah and Kumur. About 80 Lesser Frigatebirds *F. ariel* and at least two Great Frigatebirds *F. minor* were observed as part of a roost on Terbang Selatan (said sometimes to number thousands: E. Rumpeniak pers. comm.). Three Great Frigatebirds were present near Wulur on 14 August, and two Lesser Frigatebirds were noted at Kumur.

#### **LITTLE BLACK CORMORANT** *Phalacrocorax sulcirostris*

Uncommon on the coast, with two observations of singles: at an estuary near Batumerah on 30 August, and in flight near Kumur on 3 September. A locally common waterbird in the Lesser Sundas (Coates & Bishop 1997, Trainor 2005b).

#### LITTLE PIED CORMORANT Phalacrocorax melanoleucos

Three were seen on the north coast of Terbang Selatan. Locally common in the Lesser Sundas (Coates & Bishop 1997, Trainor 2005b).

#### **STRIATED HERON** Butorides striata

One in the rocky bed of the Awehnyo River on 29 August.

### **RUFOUS NIGHT HERON** *Nycticorax caledonicus*

One observed at dawn, feeding in a stream near Air Panas on 15 August. Initially identified as a Black-crowned Night Heron *N. nycticorax*, but examination of my brief field notes 'black cap, cinnamon back' indicate that the observation undoubtedly referred to *caledonicus*. Rufous Night Heron is widespread in Wallacea, Australasia to Java and the Philippines (Coates & Bishop 1997).

### **OSPREY** Pandion haliaetus

Relatively frequent on coasts with six records of singles at Kumur, Batumerah and Terbang Selatan. Osprey is generally uncommon in the Lesser Sundas (Coates & Bishop 1997) and rare in Timor-Leste (CRT unpubl.).

#### **BRAHMINY KITE** Haliastur indus

Singles and groups of up to four frequent along the coast and inland to 400 m. Birds in juvenile plumage were recorded at Kelhi and Air Panas on 26 August.

### WHITE-BELLIED SEA EAGLE Haliaeetus leucogaster

Common and widespread as singles and pairs on the coasts of Damar and the Terbang Islands. Four pairs and several singles were observed over 8 km between Wulur to Tanjung Paran (the southernmost tip of the island) on 7 September.

### BONELLI'S EAGLE Hieraaetus fasciatus

Uncommon in primary evergreen forest and forest edge, with a single observed over forest above Wulur (350 m) on 21 August and one over Wulur on 24 August. A pair of eagles soaring high over Batumerah on 30 August was probably this species. Subspecies *renschi* is endemic to the Lesser Sundas (Coates & Bishop 1997).

### **SPOTTED KESTREL** Falco moluccensis

An uncommon bird: just three singles observed in secondary habitat.

### **RUDDY TURNSTONE** Arenaria interpres

One in breeding plumage on a beach at Terbang Selatan on 8 September. During southbound migration this Holarctic wader is generally an uncommon and rapid transient through the Lesser Sundas (Coates & Bishop 1997, Trainor 2005b).

### BARRED DOVE Geopelia maugei

This Wallacean endemic was surprisingly uncommon and local in coastal woodlands adjacent to mangrove, with two observations and a vocal record at Wulur and Batumerah. In the Lesser Sundas it is typically abundant in second growth and woodland (Coates & Bishop 1997).

### **BRUSH CUCKOO** Cacomantis variolosus

A cuckoo heard calling (*fear a fear*) in agricultural land near Wulur on 15 August was probably Brush Cuckoo, but there were no observations or further aural records.

Brush Cuckoo departs Australia in April–October when it is widespread in southeast Wallacea including on Kisar and Kai (Coates & Bishop 1997).

### AUSTRALIAN KOEL Eudynamys cyanocephala

The species' distinctive calls were heard in dry forest on Terbang Utara, but no direct observations.

### CHRYSOCOCCYX SP.

A cuckoo calling on Terbang Utara with an accelerating trill of 1.5–2.0 seconds (unlike that of Little Bronze Cuckoo), but not seen or tape-recorded, was probably Pied Bronze Cuckoo *C. crassirostris*, which taxon was recently regarded as a subspecies of Little Bronze Cuckoo (Payne 2005). The closest populations are on the Babar Islands, 125 km to the south-east (Coates & Bishop 1997). The call of Pied Bronze Cuckoo is described as a very rapid trill of 3–6 seconds that swells in volume and then fades (Coates & Bishop 1997).

### BARN OWL Tyto alba

Numerous, mostly aural, records of Tyto owls, initially identified as Barn Owl Tyto alba (I was unfamiliar with masked owls at the time). The call was a harsh screech, typical of Tyto. However, the single observation of a bird perched at 16 m in the understorey of tall, intact primary forest at Wulur (200 m; 20 August) perhaps involved a masked owl. Barn Owls are infrequently recorded in tropical forest, whilst a masked owl would be more likely in such habitat. Lesser Masked Owl T. sororcula is known from Seram, Buru and Tanimbar (Coates & Bishop 1997), but the presence of an undescribed taxon on Damar is plausible. A local man spotted another owl in a coconut plantation near Wulur on 14 August (B. Romode pers. comm.). Testament to their abundance, harsh screeching calls, probably from Barn Owls, were heard from shortly after dusk until dawn, at Wulur (once at 19.40 h), and Kumur (21.05, 23.40, 00.40, 01.20 h)-mostly near forest edge or over gardens. However, at Batumerah a Tyto called (at 19.13 h) from a garden plot surrounded by primary forest, and calls on Terbang Selatan (05.50 h) and Terbang Utara (19.45 h) emanated from dense coastal strand and tropical dry forest-probably a less typical habitat for Barn Owl. Typical Tyto prey such as rodents (Rattus rattus or R. exulans?) was abundant in gardens on Damar and Terbang Utara, and might have attracted Tyto to such areas. Another prey of masked owls, Common Spotted Cuscus Phalanger orientalis, was abundant in forest on Damar, as evidenced by the number of scats on the ground.

### **RAINBOW BEE-EATER** Merops ornatus

Five only were observed on Damar at Batumerah, with a flock of c.50 on Terbang Selatan. Very common in the Lesser Sundas (Coates & Bishop 1997), these were probably dry-season migrants from Australia, but a resident population is possible.

#### BLACK-FACED MUNIA Lonchura molucca

Apparently rare with just three observations of 3–15 in degraded coastal habitat. On Terbang Utara finches were heard above the beach but not observed, thus their specific identity was unconfirmed. Widespread in Wallacea and generally common, but uncommon on nearby Timor (Coates & Bishop 1997).

### Discussion

Most Banda Sea islands have not been surveyed in more than 100 years and beg more attention (see Table 4; also Trainor & Leitão 2007). The Damar avifauna recorded in 2001 differed substantially from that reported by 19th-century collectors. Fifteen species were added to the island list (excluding the islets, not visited by the collectors), but a further 19 species recorded earlier were overlooked, as either seasonally absent or having become locally extinct (see Appendix). For instance, three monarchs collected in the 1890s went unrecorded in 2001. Blackbibbed Monarch Monarcha mundus is still one of the commonest forest birds on nearby Yamdena (Bishop & Brickle 1998), but members of this group, including the other missing species, Island Monarch M. cinerascens and Broad-billed Flycatcher Myiagra ruficollis, often exhibit highly localised distributions (Butchart et al. 1996, Moeliker & Heij 1995). Status updates on these birds, as well as Kai Cicadabird Coracina dispar and Tricoloured Parrotfinch Erythrura tricolor would be valuable. A 'fine series' of Kai Cicadabird was taken on Damar by Kühn, but it seems to be a particularly inconspicuous species and was either overlooked by the current survey or has been extirpated; it is rare on nearby Yamdena (Hartert 1900, Coates & Bishop 1997). On Damar, Metallic Starling Aplonis metallica is represented by the distinctive race *circumscripta*, which has not been recorded since the 19th century (Forbes 1884, Bishop & Brickle 1998). Further searches are needed for this taxon. Only Tyto owls were heard calling at night, but specific searches for Ninox and Otus

Island	Area (km²)	Number of restricted-range spp.	Last survey year (reference)
Wetar	2,684	22	1902, 1990 (Hartert 1904, Coates & Bishop 1997)
Kisar	98	5	1901, 2001 (Hartert 1904, Trainor 2003)
Romang (group)	c.240	12	1902 (Hartert 1904)
Leti	100	7	1902 (Hartert 1904)
Moa	349	9	1902 (Hartert 1904)
Lakor	100		Never surveyed
Damar	198	15	2001, this survey
Sermata	188	5	Hartert (1911a)
Babar (group)	c.700	15	1905 (Hartert 1906a, 1911b)
Luang	70	3	1906 (Hartert 1906b, 1911c)
Tanimbar (group)	c.5,000	22	1993, 2000 (Jepson et al. 2001; P. Wood pers. comm

TABLE 4

Survey effort, island area and number of restricted-range (RR) birds on selected Banda Sea islands.

owls using playback might yield interesting results in light of the dearth of knowledge of these species in Australasia (Debus 2002, Olsen *et al.* 2002, Indrawan & Somadikarta 2004). During the survey there was no response by *Ninox* owls to calls of Southern Boobook *N. novaeseelandiae fusca* (from Timor), but any *Ninox* on Damar might have different vocals. I found *Tyto* owls to be common on Damar, with numerous aural records. The observation of a *Tyto* in forest was more likely a masked owl, though extralimitally Barn Owls do occasionally use primary forest (D. James pers. comm.). Future surveys should target masked owls to confirm their presence or absence.

Damar Flycatcher was observed for the first time in 103 years. The most important factor determining its occurrence was the presence of tropical forest. It was absent from secondary forest and extensive crop and plantation lands directly adjacent to villages, but was recorded frequently in or around tropical semievergreen forest at 60-100 m and true evergreen forest above c.100 m, in broadly the same areas as reported by Kühn in 1898. There were no records from dry forest, but this habitat was relatively poorly sampled (Table 1) and occupies just c.5% of the estimated 14,850 ha of closed-canopy forest on the island. To simplify matters, I assume that Damar Flycatcher does occur in dry forest and, because it provides relatively limited potential Damar Flycatcher habitat, contributes little to a population estimate. Records were obtained from all three sites which I was able to extensively survey during early to mid morning, but not from 'Wulur, 3 km southeast', with similar habitat but which was accessed opportunistically just once at noon. The frequency of direct observations and aural records suggests that, in forest, Damar Flycatchers have a relatively high population density.

Very few population estimates are available for *Ficedula* anywhere in Wallacea, but Jones *et al.* (1995) estimated that of Sumba Flycatcher *F. harterti* at 0.67 birds/ha. If this value is (albeit crudely) transposed to Damar and multiplied by the estimated forest cover of 14,850 ha, it would give an island-wide population estimate of 22,164 birds. At a similarly conservative estimate of one pair/ha, the population would number 14,850 pairs. Taking the range of values yields an overall population of *c.*20,000–30,000 birds. Damar Flycatcher densities may vary with forest type, elevation and perhaps slope, and these aspects should be considered when designing surveys for this bird.

Since Kühn's visit, forest cover has declined by c.25%, to 14,850 ha. Assuming it was close to 100% in the 1890s, and that most of the Damar Flycatcher population displaced from land subsequently converted to agriculture died out, the total population may have shrunk by approximately the same percentage.

Damar Flycatcher was previously classified as Vulnerable (D2) (BirdLife International 2001), a status applied because the number of localities at which it was known was considered sufficiently few to make it prone to the effects of human activities or stochastic events within a very short time period. The most plausible real threat is further deforestation, which is likely to occur through small-scale subsistence agricultural clearance, rather than large-scale commercial logging, and hence is unlikely to lead to rapid habitat loss in the near future. *F. henrici* therefore should no longer should be classed as Vulnerable under D2. I recommend reclassification as Near Threatened, as it probably approaches the threshold for Vulnerable under criterion C1 (10,000 mature individuals and declining by >10% in ten years) but not under criteria A (population reduction of >30% over 10 years or three generations), or B (extent of occurrence below a critical 200 km<sup>2</sup> but habitat not severely fragmented and on current information not undergoing (rapid) continuing decline; nor is there extreme fluctuation in habitat quality or number of locations occupied, subpopulations or individuals). However, the area and condition of habitat should be monitored, and further surveys are required to refine my preliminary (and crude) population estimate.

At community level, the main long- and medium- to short-term threats to Damar's avifauna are vulcanism, illegal logging and forest conversion for agriculture, predation by introduced rats, and hunting for bush-meat and trade. Earthquakes and volcanic eruption are potential threats to all forest biota on Damar. The island is close to the edge of the Indo-Australian plate and consequently in one of the most seismically active regions on Earth. Wurlali is an andesitic stratovolcano that last erupted in 1892, but in 1993 earthquakes resulted in landslides and local forest loss (<50 ha). A major eruption of Wurlali poses a high but unpredictable risk to forest; the presence of a 5 km-wide caldera is testament to the explosive power of past eruptions.

There is no history of commercial logging on Damar, but timber is cut illegally and sold to Chinese-Indonesian traders on Damar with trade links to markets in Kupang (West Timor), Ambon, Saumlaki (Tanimbar Islands) and Java. I observed no large-scale timber operations, but modest volumes  $(c.5-10 \text{ m}^3)$  were being loaded onto a ship as I departed. At Wulur and Batumerah, the establishment of many new shifting agriculture plots (c.0.3-1.0 ha each) in primary forest has caused direct forest loss and, historically, forest has been lost from much of the settled north-east. High-grade timber is also selectively harvested for subsistence-level house and dugout canoe construction, and timber is often cut and traded during the preparation of shifting agriculture plots.

Most of the globally Near-Threatened, restricted-range and forest-dependent species maintain relatively high population densities on Damar and appear at little risk of imminent extinction. Some are under-recorded for behavioural reasons. Cinnamon-banded Kingfisher is an inconspicuous species that typically calls in chorus only at dawn and dusk, and appears to have been much overlooked by visiting birdwatchers in the Lesser Sundas. It is under no threat of extinction on Damar or Timor (CRT unpubl.). Among non-forest birds, the status of Beach Thickknee is poorly known in Wallacea, but a significant local population exists on the Terbang Islands. All pigeons, Orange-footed Scrubfowl and both parrots, in contrast, are selectively targeted using air rifles, slingshots, set snares and fish-nets. Bird trapping and trade in 2001 appeared low-level because communal violence had disrupted the main regional bird market at Ambon. However, two forest-dependent

hole-nesting parrots, Blue-streaked Lory and Olive-headed Lorikeet, continue to be targeted, being sold to passing ships or taken directly to markets. The small population of Blue-streaked Lory (at least), fidelity to nest sites and ease of capture in flowering trees increases the susceptibility of these parrots to decline. Better population estimates are needed for the Near Threatened Blue-streaked Lory and Olive-headed Lorikeet on Damar, and updated information on trade throughout their ranges and at national markets would be valuable.

Large birds targeted for bush meat (Orange-footed Scrubfowl and *Ducula* pigeons) have declined near villages. The annual take of Blue-tailed Imperial Pigeon, crudely estimated (*c*.20 per day over 352 days) at *c*.7,000 individuals, might be below natural recruitment levels, based on its extraordinary abundance in forest. This pigeon is endangered by hunting on Sangihe, north of Sulawesi (Riley 2002). Pink-headed Imperial Pigeon is also hunted, as throughout its range, but maintains strong populations on Damar and the Terbang Islands.

On Damar introduced rats, probably Ship Rat *Rattus rattus*, were abundant in forest and particularly Terbang Utara. I suspect their involvement in the decline of colonial-nesting species such as Metallic Starling, and perhaps the absence of certain small-island flycatchers and monarchs.

#### Acknowledgements

The survey was motivated by the Damar Flycatcher account in Threatened birds of Asia and was supported by the Indonesian government at all levels, with permits from Sospol and the Directorate General of Forest Protection and Nature Conservation (PHKA). Stuart Butchart commented on the status of Damar Flycatcher; Robert B. Payne provided a description of the call of Little Bronze Cuckoo and clarified the status of race rufomerus; Nigel Collar provided dates of flycatcher specimens; Guy Dutson and Roger Safford made helpful comments on the manuscript; David Wells and Murray Bruce reviewed and made significant improvements to the final submission; and Richard Ranft analysed the calls of Little Bronze Cuckoo and Damar Flycatcher, and provided sonograms and technical description for both. Thanks to BirdLife International-Indonesia Programme for funding and administrative support: Yusup Cahyadin, Woro Hapsari, Abdul Holik, Herly Lisdawati, Sukianto Lusli, Yan Persulessy, David Purmiasa, Henny Sembiring, Julie Soplantila and Pete Wood. Jeni Shannaz prepared the map. Maman Surahman (PHKA Bali Barat National Park) assisted with travel arrangements. Clemens Bulurditty of PHKA Saumlaki gave important field support. On Damar, the following people made the field work possible: Markus Surlialy, Arius Romer and Cundrad Surlialy (at Batumerah), Arnol Yosias Rommer, Gasper Leliwiari, Simon, Pete & Alexander Rommer (Kumur), and Sigrandus Romode and family, Yan Lutruwowan, Nus Rumihin, Yafed Romode, Buce Romode, Elias Rumpeniak, Emus Rumappar and Una Letty (Wulur).

References:

- BirdLife International. 2001. Threatened birds of Asia: the BirdLife International Red Data book. BirdLife International, Cambridge, UK.
- BirdLife-IP. 2001. Damar Flycatcher appears after 103 years. The Jakarta Post 21 October: 16.
- BirdLife International 2004. Threatened birds of the world 2004. CD-ROM. BirdLife International, Cambridge, UK.
- Bishop, D. & Brickle, N. 1998. An annotated checklist of the birds of the Tanimbar Islands. *Kukila* 10: 115–150.
- Brooker, M. G. & Brooker, L. C.1989. Cuckoo hosts in Australia. Aust. Zool. Rev. 2: 1-67.

- Butchart, S. H. M., Brooks, T. M., Davies, C. W. N., Dharmaputra, G., Dutson, G. C. L., Lowen, J. C. & Sahu, H. 1996. The conservation status of forest birds on Flores and Sumbawa, Indonesia. *Bird Conserv. Intern.* 6: 335–370.
- Chlenova, S. F. & Chlenov, M. A. 2006. West Damar language or Damar-Batumerah, an isolate in southeastern Indonesia. *Tenth Intern. Conf. Austronesian Linguistics*, 17–20 January 2006, Porta Princesa City, Palawan, Philippines (www.sil.org/aisa/philippines/paper.html).
- Coates, B. J. & Bishop, K. D. 1997. A guide to the birds of Wallacea. Dove Publications, Alderley.
- Debus, S. 2002. Distribution, taxonomy, status and major threatening processes of owls in the Australasian region. Pp. 355–363 in Newton, I., Kavanagh, R., Olsen, J. & Taylor, I. (eds.) Ecology and conservation of owls. CSIRO Publishing, Canberra.
- Finsch, O. 1901. Systematische Übersicht der Vögel der Südwest-Inseln. Notes Leyden Mus. 22: 225-309.
- Forbes, H. O. 1884. Remarks on a paper by Dr. A. B. Meyer on a collection of birds from the East-Indian Archipelago, with special reference to those described by him from the Timor-Laut group of islands. *Proc. Zool. Soc. Lond.* 29: 425–434.
- Hartert, E. 1899. [Dammeria henrici, n. gen. et sp.] Bull. Brit. Orn. Cl. 8: 57-58.
- Hartert, E. 1900. The birds of Dammer Island in the Banda Sea. Novit. Zool. 7: 12-24.
- Hartert, E. 1904. On the birds of the South-west Islands of Wetter, Roma, Kisser, Letti and Moa. *Novit. Zool.* 11: 174–221.
- Hartert, E. 1906a. On the birds of the island of Babber. Novit. Zool. 13: 288-302.
- Hartert, E. 1906b. On the birds of Luang. Novit. Zool. 13: 302-304.
- Hartert, E. 1911a. On the birds of Sermatta, one of the South-West Islands. Novit. Zool. 18: 161-167.
- Hartert, E. 1911b. Additions to the avifauna of Babber. Novit. Zool. 18: 169.
- Hartert, E. 1911c. Additions to the avifauna of Luang. Novit. Zool. 18: 170.
- Indrawan, M. & Somadikarta. 2004. A new hawk-owl from the Togian Islands, Gulf of Tomini, central Sulawesi, Indonesia. Bull. Brit. Orn. Cl. 124: 160–171.
- Jepson, P., Brickle, N. & Chayadin, Y. 2001. The conservation status of Tanimbar corella and bluestreaked lory on the Tanimbar Islands, Indonesia: results of a rapid contextual survey. *Oryx* 35: 224–233.
- Lambert, F. L. 1998a. A new species of Gymnocrex from the Talaud Islands, Indonesia. Forktail 13: 1-6.
- Lambert, F. L. 1998b. A new species of *Amaurornis* from the Talaud Islands, Indonesia, and a review of bush hens occurring from the Philippines to Australasia. *Bull. Brit. Orn. Cl.* 118: 67–82.
- LeCroy, M. 2005. Type specimens in the American Museum of Natural History. Part 6. Passeriformes: Prunellidae, Turdidae, Orthonychidae, Timaliidae, Paradoxornithidae, Picathartidae and Polioptilidae. *Bull. Amer. Mus. Nat. Hist.* 292: 1–132.
- Meyer, A. B. 1884. Über neue und ungenügend bekannte Vögel, Nester und Eier aus dem Osttindischen Archipel im Königl. Zool. Mus. Dresden, Abh. Naturwiss. Ges. Isis Dresden 1: 1–64.
- Moeliker, C. W. & Heij, C. J. 1995. The rediscovery of *Monarcha boanensis* (Aves: Monarchidae) from Boano Island, Indonesia. *Deinsea* 2: 123–143.
- Olsen, J., Wink, M., Sauer-Gürth, H. & Trost, S. 2002. A new *Ninox* from Sumba, Indonesia. *Emu* 102: 223–231.
- Pannell, S. W. 1991. Narrative boundaries national horizon; the politics of identity in Amaya, Maluku Tenggara, Indonesia. Doctoral Thesis. Univ. of Adelaide.
- Payne, R. B. 2005. The cuckoos. Oxford Univ. Press.
- Rasmussen, P. C. 1999. A new species of hawk-owl Ninox from north Sulawesi, Indonesia. Wilson Bull. 111: 457–464.
- RePPProT. 1989. The land resources of Indonesia: a national overview. ODA/Ministry of Transmigration, Jakarta.
- Riley, J. 2002. Population sizes and the status of endemic and restricted-range bird species on Sangihe Island, Indonesia. *Bird Conserv. Intern.* 12: 53–78.
- Riley, J. & Wardill, J. C. 2001. The rediscovery of Cerulean Paradise-flycatcher Eutrichomyias rowleyi on Sangihe, Indonesia. Forktail 17: 45–55.

Rothschild, M. 1983. Dear Lord Rothschild: birds, butterflies and history. Hutchinson, Melbourne.

- Rozendaal, F. G. & Lambert, F. L. 1999. The taxonomic and conservation status of *Pinarolestes* sanghirensis Oustalet 1881. Forktail 15: 1–13.
- Sangster, G. & Rozendaal, F. G. 2004. Systematic notes on Asian birds, 41. Territorial songs and specieslevel taxonomy of nightjars of the *Caprimulgus macrurus* complex, with the description of a new species. *Zool. Verh. Leiden* 350: 7–45.
- Shannaz, J. 2001. Rediscovery of the Damar Flycatcher, Damar Island, Maluku, Indonesia. Oriental Bird Cl. Bull. 34: 38–39.
- Sharpe, R. B. 1894. List of birds from Damma Island, East Indian Archipelago. Ann. Mag. Nat. Hist. 14: 56–58.
- Shepherd, C., Sukumaran, J. & Wich, S. A. 2004. Open season: an analysis of the pet trade in Medan, Sumatra during 1997–2001. Traffic Southeast Asia Rep., Selangor.
- Stattersfield, A. J., Crosby, M. J., Long, A. J. & Wege, D. C. 1998. Endemic Bird Areas of the world: priorities for biodiversity conservation. BirdLife International, Cambridge, UK.
- Sujatnika, Jepson, P., Soehartono, T. R., Crosby, M. J. & Mardiastuti, A. 1995. Conserving Indonesian biodiversity: the Endemic Bird Area approach. PHPA/BirdLife International-Indonesia Programme, Bogor.
- Trainor, C. 2002a. An expedition to Damar Island, south-west Maluku, Indonesia. Oriental Bird Cl. Bull. 36: 18–23.
- Trainor, C. 2002b. Rediscovery of the Damar flycatcher *Ficedula henrici* on Damar Island, Indonesia, after 103 years. *Oryx* 36: 14.
- Trainor, C. R. 2002c. The birds of Adonara, Lesser Sundas, Indonesia. Forktail 18: 93-100.
- Trainor, C. R. 2002d. Status and habitat use of bird communities on Lembata Island, Wallacea, Indonesia, with particular reference to a simple technique for sampling small-island avifaunas. *Bird Conserv. Intern.* 12: 365–381.
- Trainor, C. 2003. Bird observations from Kisar Island, Lesser Sundas, Indonesia. Kukila 12: 54-58.
- Trainor, C. R. 2005a. Species richness, habitat use and conservation of birds of Alor Island, Lesser Sundas, Indonesia. *Emu* 105: 127–135.
- Trainor, C. R. 2005b. Waterbirds and coastal seabirds of Timor-Leste (East Timor): status and distribution from surveys in August 2002–December 2004. *Forktail* 21: 61–78.
- Trainor, C. R. 2007. Changes in bird species composition on a remote and well-forested Wallacean Island. *Biol. Conserv.* 140: 373–385
- Trainor, C. R. & Leitão, P. J. 2007. Further significant bird records from Atauro Island, Timor-Leste (East Timor). Forktail 23: 155–158.
- Trainor, C. R. & Soares, T. 2004. Birds of Atauro Island, Timor Leste (East Timor). Forktail 20: 41-48.
- van Steenis-Kruseman, M. J. 1950. Malaysian plant collectors and collections, being a cyclopaedia of botanical exploration in Malaysia and a guide to the concerned literature up to the year 1950. *Flora Malesiana* Series I: Spermatophyta, vol. 1: 1–639.
- White, C. M. N. & Bruce, M. D. 1986. The birds of Wallacea: an annotated check-list. British Ornithologists' Union, London.
- Address: BirdLife International-Indonesia Programme, P.O. Box 310, Bogor, 16003, Indonesia. Current address: Tropical Savannas Management Cooperative Research Centre, Charles Darwin University, Northern Territory, Australia, e-mail: colin.trainor@cdu.edu.au

#### APPENDIX

Species recorded for Damar Island at three main and five minor sites, with data concerning species collected during visits in the 1890s from Hartert (1900). Species recorded in 1898, but not in 2001 are denoted '0'. Note that Brown Goshawk *Accipiter fasciatus* is listed for Damar by Finsch (1901) but I did not locate a specimen; Meyer (1884) noted *Urospizias torquatus* (a synonym for Brown Goshawk), which Hartert (1900) corrected to *Astur polionotus* (a synonym for Variable Goshawk *A. novaehollandiae*).

Ξ

	883/1884 collection	u	u	Batumerah forest	ıst				SE	ra	ıtan
	4 co	1891 collection	898 collection	ah f	Awehnyo coast		Bebar Timur		Wulur, 3 km SE	Terbang Utara	Terbang Selatan
	/188	coll	coll	mer	nyo	ın	ır Ti	п	ır, 3	ang	ang
	883	891	868	3atu	<b>We</b>	Kumur	3eba	Wulur	Vult	ſerb	ſerb
Fregata minor Great Frigatebird	-	-	-	-	~		-	x	-	x	x
Fregata ariel Lesser Frigatebird						х				x	x
Phalacrocorax sulcirostris Lttle Black Cormorant				x		x					
Phalacrocorax melanoleucos Little Pied Cormorant											х
Sula sula Red-footed Booby			0								
Egretta sacra Pacific Reef Heron			х	х		х		х		х	х
Bubulcus ibis Cattle Egret			0								
Butorides striata Striated Heron						х					
Nycticorax caledonicus Rufous Night Heron								х			
Pandion haliaetus Osprey					х			х			х
Aviceda subcristata Pacific Baza			x					х			
Haliastur indus Brahminy Kite					х	х	х	х	х	х	х
Haliaeetus leucogaster White-bellied Sea Eagle					х	x	х		х	х	х
Accipiter fasciatus Brown Goshawk						х	х	х			
Accipiter novaehollandiae Variable Goshawk	х		х		х	х	х	х	х		х
Hieraaetus fasciatus Bonelli's Eagle								х			
Falco moluccensis Spotted Kestrel							х	х			
Megapodius reinwardt Orange-footed Scrubfowl			х	х	х	х	х	х		х	х
Rallina tricolor Red-necked Crake			0					?			
Amaurornis phoenicurus White-breasted Waterhen			0								
Pluvialis fulva Pacific Golden Plover			х								х
Numenius phaeopus Whimbrel			0								
Limosa lapponica Bar-tailed Godwit			0								
Tringa nebularia Common Greenshank			0								
Actitis hypoleucos Common Sandpiper			х		х			х		х	х
Heteroscelus brevipes Grey-tailed Tattler			0								
Arenaria interpres Ruddy Turnstone											х
Calidris tenuirostris Great Knot			0								
Esacus neglectus Beach Thick-knee										х	х
Columba vitiensis Metallic Pigeon			х	х		х		х			
Macropygia magna Barred-necked Cuckoo-Dove				х	х						
Chalcophaps indica Emerald Dove			х		х	х	х	х	х	х	х
Geopelia maugei Barred Dove					х			х	х		
Ptilinopus cinctus Black-backed Fruit Dove			х	х	х	х		х	х	х	х
Ptilinopus regina Rose-crowned Fruit Dove		х	х	х	х	х	х	х		х	х
Ducula concinna Blue-tailed Imperial Pigeon	х	х	х	х	х	х	х	х	х		х
Ducula rosacea Pink-headed Imperial Pigeon		х	х	X	х		х	х	х	х	х
Eos reticulata Blue-streaked Lory			х	х		х		х	х		
Trichoglossus euteles Olive-headed Lorikeet		х	х	х	х	х	х	х			
Cuculus saturatus Oriental Cuckoo			0								
Cacomantis variolosus? Brush Cuckoo								х			
Chrysococcyx minutillus Little Bronze Cuckoo			х	х	х	х	х	х	х		
Chrysococcyx sp. bronze cuckoo										х	
Eudynamys cyanocephala Australian Koel										х	
Tyto spp. Barn/masked owl				х		х		х		х	х

Colin R. Trainor

321

Collocalia esculenta Glossy Swiftlet			x	х	х	х	х	х	х	х	x
Halcyon chloris Collared Kingfisher			x	~	x	л	x	x	x	x	x
Todiramphus australasia Cinnamon-banded Kingfisher			x	х	~	х	x	x	x		~
Merops ornatus Rainbow Bee-eater			~	x		~	~	A.	Λ		х
Eurystomus orientalis Common Dollarbird			х	~		x	x				~
Pitta elegans Elegant Pitta	х		x	х		x	^	x		х	
Hirundo rustica Barn Swallow	~	x	^	x		x		x		x	
Motacilla cinerea Grey Wagtail		л	0	^		^		~		~	
Anthus gustavi Pechora Pipit			0								
Coracina novaehollandiae Black-faced Cuckoo-Shrike		х	0					v			v
Coracina novaenonananae Black-laced Cuckoo-Shrike		А	х					х			х
Zoothera peronii Orange-banded Thrush				v							
			X	X	x	X	x	x	X		
Gerygone dorsalis Rufous-sided Gerygone			X	X	х	X	х	x	х	х	х
Ficedula henrici Damar Flycatcher			X	х		х		х			
Monarcha cinerascens Island Monarch			0								
Monarcha mundus Black-bibbed Monarch			0								
Monarcha trivirgatus Spectacled Monarch			X	х	х	х		х	х		
Myiagra ruficollis Broad-billed Flycatcher			0								
Rhipidura rufiventris Northern Fantail		х	х	х	х	х	х	х	х		х
Rhipidura rufifrons Rufous Fantail		х	х	х	х	х	х	х	х	х	Х
Pachycephala pectoralis Golden Whistler			х	х	х	х		х	х		
Pachycephala leucogastra White-bellied Whistler			х	х	х		Х	х	х	х	
Aplonis metallica Metallic Starling			0								
Lichmera squamata Scaly-breasted Honeyeater		х	х	х	х	х	х	х	х	х	х
Dicaeum maugei Red-chested Flowerpecker			х		х	х	х	х	х		
Zosterops citrinellus Ashy-bellied White-eye		х	х	х	х	х	х	х	х	х	х
Erythrura tricolor Tricoloured Parrot-finch			0								
Lonchura molucca Black-faced Munia					х			х	х	?	

© British Ornithologists' Club 2007

# The genus Macropygia Swainson, 1837, and its type species

# by Steven M. S. Gregory, Edward C. Dickinson & Claire Voisin

Received 26 November 2006

Swainson (1837) listed three species under his new genus, *Macropygia*, so the type species is to be found in subsequent designation. Schodde & Mason (1997: 23) came to the conclusion that Selby (1840) designated *Columba phasianella* albeit 'without author and date'. This view contradicts previous views and the treatment in Peters (1938), and thus disrupts stability. We have examined Selby (1840) and are unconvinced that Selby made a valid designation, principally because Swainson's use of 'pl. col. 100' should be integral to any such decision, or at least to its interpretation, and by its omission the identity of the selected form became ambiguous.